

**UNITED STATES DISTRICT COURT
FOR THE SOUTHERN DISTRICT OF NEW YORK**

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SOFTWARE FREEDOM CONSERVANCY, INC. and :
ERIK ANDERSEN, :
Plaintiffs, : ECF CASE
-against- : 09-CV-10155 (SAS)
: :
BEST BUY CO., INC., SAMSUNG ELECTRONICS :
AMERICA, INC., WESTINGHOUSE DIGITAL :
ELECTRONICS, LLC, JVC AMERICAS :
CORPORATION, WESTERN DIGITAL :
TECHNOLOGIES, INC., ROBERT BOSCH LLC, :
PHOEBE MICRO, INC., HUMAX USA INC., :
COMTREND CORPORATION, DOBBS-STANFORD :
CORPORATION, VERSA TECHNOLOGY INC., :
ZYXEL COMMUNICATIONS INC., ASTAK INC., :
and GCI TECHNOLOGIES CORPORATION, :
Defendants. :
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**DECLARATION OF BRADLEY
M. KUHN IN SUPPORT OF
PLAINTIFFS REPLY TO
DEFENDANT BEST BUY'S
OPPOSITION TO PLAINTIFFS'
MOTION FOR PRELIMINARY
INJUNCTION**

I, Bradley M. Kuhn, pursuant to 28 U.S.C. 1746, declare as follows:

1. I am President of the Software Freedom Conservancy ("Conservancy"), one of the plaintiffs in this action. I offer this declaration in support of Plaintiffs' reply to Defendant Best Buy Co., Inc.'s ("Best Buy") opposition to Plaintiffs' Motion for Preliminary Injunction against defendants Best Buy and Phoebe Micro, Inc. ("Phoebe Micro").
2. I hold a B.S. and M.S. in Computer Science, and have been a software developer and software freedom advocate since the early 1990's. I have extensive experience investigating the

use of open source and Free Software by third parties.

3. Revision control system software is a commonly used tool to manage changes to information stored in computer data files. Some popular revision control system software programs are GNU RCS, Concurrent Versions System, Subversion, and Git. In software development, revision control system software permits developers to collaborate in developing software projects and, in particular, on snippets of code within a software project. This software also enables developers to quickly locate and repair bugs within a software program by retrieving and running different versions of the software in order to determine which version of the software requires repair. To this end, revision control systems record every detail of every modification: who made it, when, and what was changed. The modifications are recorded in batches, commonly known as “commits.” Every “commit” to the system is given its own unique identifier. Revision control systems also possess the functionality to detect modifications where the contributor merely moved code from one part of the set of data files to another.

4. Commit logs are records of the commits made to the program. Commit logs are produced automatically by revision control system software, although comments may be added to the commit logs at the time commits are being made by the person making the commit. Frequently, open source projects identify a single maintainer or small group of maintainers to provide stewardship to the project. These maintainers are the only persons who may make commits to the program. Other contributors to the program submit their proposed changes to the maintainer, and then it is his or her decision whether and how to include those contributions. Some contributions get adopted wholesale. Others get rejected. Others still get modified by the

maintainer before he or she commits them to the project.

5. The BusyBox software project utilizes revision control system software for the above reasons and stores the commit logs on a public website: <http://www.busybox.net/>. Erik Andersen was both a principal contributor to and the maintainer of BusyBox from 1999 to 2006. Prior to his stewardship, BusyBox was a relatively obscure project that was not used heavily, and in particular was not the basis for embedded software contained within consumer electronics devices. Mr. Andersen is universally recognized as having matured the BusyBox project into the widely used and highly respected software program that it is today. He did this by contributing a significant amount of his own originally written code and by incorporating the efforts of other contributors. While it is of course correct that Mr. Andersen was not BusyBox's sole developer, no one can deny that he was the single most important person in developing BusyBox from what it was in 1999 to what it became in 2006 when he handed over the BusyBox maintainer responsibility to a successor.

6. I inspected the commit logs for BusyBox stored at <http://www.busybox.net> to determine Erik Andersen's recorded contributions to BusyBox version 0.60.3 made between September 2001 and April 2002 (the exact range I inspected was September 7, 2001 04:00:00 UTC to April 27, 2002 06:06:12 UTC). I found that Andersen added or was the last person to edit 8,868 lines of code to BusyBox version 0.60.3 between these dates. In particular, I ran a computer program that processed the author data associated with each line of code contained in BusyBox 0.60.3's files with names ending in ".c" or ".h", discounting situations where code was copied or moved from one part of the set of files to another, and counted the lines of code added

or last modified by Andersen during this time period. ".c" files are source code files in the C programming language. ".h" files are header files in the C programming language. ".c" files and ".h" files are contained in the set of files in BusyBox translated by a compiler into machine readable object code to be placed on and executed by machine hardware, such as in firmware to be embedded in consumer electronic devices.

7. I inspected the commit logs stored at <http://www.busybox.net> to determine Erik Andersen's recorded contributions to BusyBox version 0.60.3 that were not noted by Andersen to have been written in cooperation with another developer between the dates of September 7, 2001 04:00:00 UTC and April 27, 2002 06:06:12 UTC. I determined that Andersen added or was the last person to edit 5,794 lines of code between these dates, excluding situations where Andersen noted in the log that he was contributing a patch written (in part or in whole) by another developer. In particular, I ran a computer program that processed the author data associated with each line of code contained in BusyBox 0.60.3 files ending in ".c" or ".h" and counted the lines in each possessing a unique identification number associated to a commit by Andersen between September 7, 2001 04:00:00 UTC and April 27, 2002 06:06:12 UTC, for which, I determined from examining the log, Andersen did not attribute some or all of the work to another developer.

8. I inspected the commit logs stored at <http://www.busybox.net> to determine Erik Andersen's recorded contributions to BusyBox version 0.60.3 that were still present in BusyBox version 1.2.1. I found that of the 8,868 lines of code Andersen added or was the last to edit in BusyBox version 0.60.3, 4,884 remain unchanged in BusyBox version 1.2.1. I also found that of the 5,794 lines of code that Andersen added or was the last to edit in BusyBox version 0.60.3,

excluding situations where Andersen noted in the log that he was contributing a patch written in part or in whole by another developer, 3,078 lines of code remain unchanged in BusyBox version 1.2.1. In particular, I ran a computer program that processed the author data associated with each line of code contained in BusyBox version 1.2.1 files ending in ".c" or ".h" applying similar criteria as described in ¶ 6 and ¶ 7 of this declaration, and finding those lines where the author and timestamp data had not changed between version 0.60.3 and version 1.2.1.

9. BusyBox version 0.60.3 was published on April 27, 2002. Version 1.2.1 was published on July 28, 2006. While version 1.2.1 was indeed an improvement over version 0.60.3, it was also unquestionably based on version 0.60.3. As shown above with respect to Mr. Andersen's contributions specifically, a very large portion of the code contained in version 0.60.3 remained in version 1.2.1. Additionally, I found that 55,542 lines of code that originally appeared in 0.60.3 version still appear unchanged in version 1.2.1. In particular, I ran a computer program that found all lines in the version 1.2.1 commit history that remain exactly the same as the original author contributed them before April 27, 2002, the release date of 0.60.3. Thus, in my opinion, version 1.2.1. was derived from version 0.60.3, as the two have substantial portions of the same literal lines of code.

10. I inspected the commit logs for BusyBox stored at <http://www.busybox.net> to determine Erik Andersen's recorded contributions to BusyBox version 1.2.1 made between September 2001 and April 2006 (the exact range I inspected was September 7, 2001 04:00:00 UTC to April 10, 2006 20:37:29 UTC). I found that Andersen added or was the last person to edit 27,671 lines of code to BusyBox version 1.2.1 between these dates. In particular, I ran a

computer program that processed the author data associated with each line of code contained in BusyBox 1.2.1's files with names ending in ".c" or ".h" and counted the lines of code added or last modified by Andersen during this time period.

I declare under penalty of perjury that the forgoing is true and correct.



Bradley M. Kuhn

Executed on March 21, 2011
New York, New York